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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/038,784

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Xiaolin Lu

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7590

02/07/2006

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EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/038,784

Applicant(s)

LU ET AL.

Examiner

YOUNG T. TSE

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: page 9, line 15, "it window" should be "its window". Appropriate correction is required.

### ***Claim Objections***

2. Claims 34-38 are objected to because of the following informalities:

In claim 34:

Line 4, "receiver packet" should be "receive packet".

Lines 6, 8 and 16, "buffer" should be "buffer window".

Line 7, "a higher" should be "an upper".

Lines 10, 12, 13, 14, 15 and 18, "of packets" should be "of data packets".

Line 12, "packets;" should be "packets; and".

Line 13, "the transmitter" should be "the transmitter in the receive packet buffer window".

In claim 35, line 2, "of packets in the receive packet buffer with update" should be "of data packets in the receive packet buffer window with the updated".

In claim 36, line 2, "of packets corresponds" should be "of data packets correspond" and line 3, "a upper limit respectively of the transmit packet buffer" should be "an upper limit respectively of the transmit packet buffer window".

In claim 37:

Line 2, "receiver packet" should be "receive packet".

Line 3, "buffer window" should be "buffer window of a receiver".

Lines 4 and 6, "buffer" should be "buffer window".

Line 5, "a higher" should be "an upper".

Lines 8, 10, 13 (both occurrences) and 14, "of packets" should be "of data packets".

Line 9, "the receiver" should be "the receiver in the first plurality of data packets".

Line 10, "the transmitter;" should be "the transmitter in the receive packet buffer window; and".

In claim 38, line 2, "of packets in the receive packet buffer with update" should be "of data packets in the receive packet buffer window with the updated".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 34-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Chintada et al. (US 6,697,983 B1) or "Chintada".

With respect to claims 34-38, Chintada discloses a method or apparatus for recovering lost frames transmitted between a packet sending unit and a packet receiving unit in a data communications system including the steps of: (a) identifying a failure to successfully receive a missed frame at the packet receiving unit; (b) establishing a logical tunnel channel at the packet receiving unit to acknowledge the next successfully received frame; (c) starting a first timer at the packet receiving unit; (d) upon receiving a tunnel establishment request from the packet receiving unit, the packet sending unit resending the missed frame on the logical tunnel channel and starting a second timer; and (e) the packet sending unit resending the missed frame a specified number of times until receiving an acknowledgement from the pack receiving unit. See the abstract, column 2, lines 51-67 and column 3, lines 1-32.

Chintada also teaches that with the sliding window protocol, at any instant in time a transmitter maintains a list of consecutive sequence numbers corresponding to frames it is permitted to send. These frames fall within a "sending window." In the same manner, a receiver maintains a "receiving window" corresponding to the frames it is permitted to accept. The sending and receiving windows do not necessarily have the same upper and lower limits, or the same size. The sequence numbers within the sender's window represent frames sent but not yet acknowledged. Whenever a new data packet arrives from the network layer, it is given the next highest sequence number, and the upper edge of the window is advanced by one. When an acknowledge

is received, the lower edge of the window is advanced by one. The window continuously maintains a list of unacknowledged frames. Since frames currently within the sender's window may be lost or changed during transmission, the sender must keep all the sent frames in memory in the event a retransmission is required. See column 4, lines 31-55.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chintada et al. (US 6,765,870 B2) discloses a data link layer and a medium access control layer connected to each other by data and control paths. The data link layer is adapted to pass new data frames from a higher layer relative to the data link layer into the data link layer queue and to suspend a retransmission timer upon a congestion message received from the medium access control layer, the congestion message being responsive to a level of stored frames in the medium access control queue.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

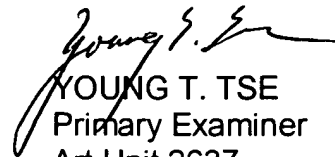
Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Thursday and alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The Central FAX Number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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YOUNG T. TSE  
Primary Examiner  
Art Unit 2637